

**INTERMODULATION DISTORTION IDENTIFICATION AND
QUANTIZATION CIRCUIT FOR A LINEAR AMPLIFIER SYSTEM**

Abstract of the Disclosure

A method and multiple carrier linear amplifier circuit reduces intermodulation distortion by sampling the multiple carrier linear amplifier radio
5 frequency signal and detecting the sampled signal at frequency increments and quantizing and nulling the intermodulation distortion. The signal can have predetermined frequency increments $f_0 \dots f_1$ situated in at least one of predetermined sub-bands. The sampled
10 radio frequency signal can be mixed with the local oscillator signal to target the centers of the multiple carriers and generate an intermediate frequency signal.